

## Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

## **Listing of Claims:**

- 1 26. (Cancelled)
- 27. (New) A labeled nickel complex compound having formula I:

I

wherein:

B independently represents doubly bonded oxygen;

C represents carbon;

D independently represents nitrogen or oxygen;

L is a detectable label, optionally attached to a linker;

M represents a nickel ion;

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b is from 0 to 6;

n is 0 to 1;

R' represents hydrogen, alkyl, aryl or a peptide chain;

R" is R, R' or G;

G represents OH, an amide or a DNA delivery agent; and

R represents a nitrogen-containing cationic group, optionally attached to a linker.

- 28. (New) The labeled nickel complex compound of claim 27, wherein said DNA delivery agent comprises intercalators, oligonucleotides, proteins or polyamines.
- 29. (New) The labeled nickel complex compound of claim 27, wherein the label is a radioactive compound, a protein ligand, a fluorescent or an enzyme.
- 30. (New) The labeled nickel complex compound of claim 27, which is labeled with biotin.
- 31. (New) The labeled nickel complex compound of claim 27, wherein R' is a peptide chain.
  - 32. (New) A labeled nickel complex compound, having formula A or B:

wherein:

R' represents hydrogen, alkyl, aryl or a peptide chain;

R" represents R, R' or G;

G represents -OH, -OR, an amide or a DNA delivery agent; and

R represents a nitrogen-containing cationic group optionally attached to a linker.

33. (New) The labeled nickel complex compound of claim 32, wherein the label is a radioactive compound, a protein ligand, a fluorescent compound, or an enzyme.

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34. (New) The labeled nickel complex compound of claim 32, which is labeled with biotin.

- 35. (New) A labeled nickel complex compound, which is Ni-salen-biotin complex.
- 36. (New) A labeled nickel complex compound, which is (Ni(salen-Lys(biotin) His Arg complex.
- 37. (New) A method for detecting a non-canonical nucleic acid sequence comprising binding the labeled nickel complex compound of claim 27, to a sample of nucleic acid, and detecting a signal of the detectable label on the labeled nickel complex compound.
- 38. (New) The method of claim 37, wherein the detectable label is a radioactive compound, a protein ligand, a fluorescent compound, or an enzyme.
  - 39. (New) The method of claim 37, wherein the detectable label is biotin.
- 40. (New) A method for detecting a non-canonical nucleic acid sequence comprising binding the labeled nickel complex compound of claim 32, to a sample of nucleic acid, and detecting a signal of the detectable label on the labeled nickel complex compound.

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41. (New) The method of claim 40, wherein the detectable label is a radioactive compound, a protein ligand, a fluorescent compound, or an enzyme.

- 42. (New) The method of claim 40, wherein the detectable label is biotin.
- 43. (New) A labeled hybrid compound comprising the labeled nickel complex compound of claim 27, complexed with a protein or oligonucleotide.
- 44. (New) The labeled hybrid compound of claim 43, wherein the labeled nickel complex compound is labeled with a radioactive compound, a protein ligand, a fluorescent compound or an enzyme.
- 45. (New) The labeled hybrid compound of claim 44, wherein a penultimate amino acid from the N-terminus of the protein is histidine.
- 46. (New) The labeled hybrid compound of claim 43, which is labeled with biotin.
- 47. (New) The labeled hybrid compound of claim 43, which is labeled with a green fluorescent protein or epitope.

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48. (New) A labeled hybrid compound comprising the labeled nickel complex compound of claim 32, complexed with a protein or oligonucleotide.

- 49. (New) The labeled hybrid compound of claim 48, wherein the labeled nickel complex compound is labeled with a radioactive compound, a protein ligand, a fluorescent compound or an enzyme.
- 50. (New) The labeled hybrid compound of claim 49, wherein a penultimate amino acid from the N-terminus of the protein is histidine.
- 51. (New) The labeled hybrid compound of claim 48, which is labeled with biotin.
- 52. (New) The labeled hybrid compound of claim 48, which is labeled with a green fluorescent protein or epitope.
- 53. (New) A method for detecting or measuring protein-nucleic acid interaction comprising mixing the labeled hybrid compound of claim 43, with a solution of nucleic acid, and assaying for the signal from a detectable label attached to the nucleic acid.
- 54. (New) The method of claim 53, wherein said label is a radioactive compound, a protein ligand, a fluorescent compound, or an enzyme.

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55. (New) A method for purifying a nucleic acid-nickel-complex adduct, comprising:

- a) mixing the labeled nickel complex compound of claim 27, with a solution of DNA,
- b) subjecting the mixture of step a) to a separation medium, wherein the medium contains a material that specifically binds to the label, and
- c) separating the bound medium from the solution mixture, wherein the adduct is bound to the material of the separation medium.
- 56. (New) The method of claim 55, wherein said separation medium is affinity chromatogram.
- 57. (New) The method of claim 56, wherein said label is biotin, and the material in the separation medium binds to biotin.
- 58. (New) The method of claim 57, wherein the material binding to biotin is avidin.
- 59. (New) The method of claim 57, wherein the material binding to biotin is streptavidin.

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- 60. (New) A method for purifying a nucleic acid-nickel-complex adduct, comprising:
- a) mixing the labeled nickel complex compound of claim 32, with a solution of DNA,
- b) subjecting the mixture to a separation medium, wherein the medium contains a material that specifically binds to the label, and
- c) separating the bound medium from the solution mixture, wherein the adduct is bound to the material of the separation medium.
- 61. (New) The method of claim 60, wherein said separation medium is affinity chromatogram.
- 62. (New) The method of claim 61, wherein the label is biotin, and the material in the separation medium binds to biotin.
- 63. (New) The method of claim 62, wherein the material binding to biotin is avidin.
- 64. (New) The method of claim 62, wherein the material binding to biotin is streptavidin.
- 65. (New) A method for detecting or measuring protein-nucleic acid interaction comprising mixing the labeled hybrid compound of claim 43, with a solution

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of nucleic acid, and assaying for the signal from a detectable label attached to the nucleic acid.

66. (New) The method of claim 53, wherein said label is a radioactive compound, a protein ligand, a fluorescent compound, or an enzyme.